

the Baltic. Eschricht states that it appears regularly in Davis's Straits in the wake of migratory fish, at the time when the Beluga and Narwhal leave their winter quarters for the Polar regions.

The following table shows the localities in which it has been caught.

Coast of England.

South Coast	A male in 1871. Its anatomy was described by Dr. Murie (Proc. Lin. Soc. 1871). Skull in Brit Mus.
Coast of Norfolk. {	Yarmouth A female (described and figured by Brightwell Ann. and Mag. Nat Hist. vol. xvii. 1846). Skull in Brit. Mus.
	Cromer Specimen shot by Mr. Upeher (Ann. & Mag. Nat. Hist. vol. xviii. 1866). Skull in British Museum.
	Lowestoft Specimen captured a few weeks ago. In the possession of Mr. J. W. Clark of Cambridge.
Great Grimsby	Young female, now described. Skeleton in Edin. Univ. Museum.
Hartlepool.....	First recorded specimen, 1834. Skull in Cambridge Museum.

Coast of Belgium, Denmark, Norway, and Sweden.

Østend	Two females, described by Van Beneden (Nouv. Mém. de l'Acad. Brux. t. xxxii. 1861).
Kiel	Two specimens, one of which furnished to M. Claudius the subject of his memoir entitled "Dissert. de Lagenorhynchis" (Kilia 1853).
Bergen	One specimen. Skull in Museum there.
Gullholmen	Two pregnant females. Skeleton of one preserved by F. A. Smith, Acad. Docent., and now in the Museum of the Univ. of Upsala.
Skånör	One stranded. Lower jaw in the Zoological Museum of the University of Lund.

Specimens have also been seen off the Færoe Islands.

In conclusion my best thanks are due to Mr. J. H. Scott, Demonstrator of Anatomy, for the accurate water-colour drawing which he executed of the Great-Grimsby Dolphin. It is from it that the accompanying figure (Plate LXIV. fig. 1) is taken.

13. Notes on a Dolphin taken off the Coast of Norfolk.

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(Plate LXIV. fig. 2 & Plate LXV.)

On the 26th of March in the present year a large Porpoise was caught by some fishermen off Lowestoft. It was fortunately secured for me on the same day, and despatched to Cambridge. The men who captured it called it a White-beaked Bottlenose.

The animal was a male, and, as was discovered afterwards by the condition of the bones, quite young. The weight was 139 pounds.

The principal dimensions were as follows:—		ft.	in.
Length, from anterior edge of upper lip to notch in middle of caudal fin	5	5	$\frac{1}{2}$
From upper lip to posterior edge of blow-hole (following curve) ..	0	11	
From upper lip to anterior edge of dorsal fin (following curve) ..	2	6	
From anterior edge of dorsal fin to notch in middle of caudal fin (following curve)	3	4	
Length from upper lip to notch in middle of caudal fin (following curve)	5	10	
Height of anterior edge of dorsal fin (following curve)	0	10	$\frac{3}{4}$
Total vertical height of the same	0	6	
From upper lip to junction of anterior edge of pectoral fin with the body	1	2	$\frac{1}{2}$
From tip of snout to navel (marked by a black V-shaped spot $\frac{7}{8}$ inch long)	2	6	
From tip of snout to pudendal orifice	3	0	$\frac{3}{4}$
From tip of snout to anus	3	10	
From upper lip to angle of mouth	0	7	$\frac{5}{8}$
From upper lip to anterior angle of eye	0	9	$\frac{1}{4}$
Length of eye-aperture	0	0	$\frac{3}{4}$
From posterior angle of eye to ear-aperture	0	1	$\frac{3}{4}$
From angle of mouth to anterior angle of eye	0	1	$\frac{1}{4}$
Pectoral fin, length from junction of anterior edge with body to tip	1	0	
Pectoral fin, from junction of posterior edge with body to tip ..	0	7	$\frac{3}{4}$
Pectoral fin, breadth at base	0	5	
Pectoral fin, greatest breadth ..	0	4	$\frac{1}{2}$
Breadth of caudal fin across the flukes	1	3	
Vertical height of body, at the eye	0	8	$\frac{3}{4}$
" " " immediately behind the pectoral ..	0	11	
" " " immediately in front of the dorsal fin ..	0	11	$\frac{3}{4}$
Width between the pectorals	0	5	$\frac{1}{4}$

Behind the dorsal fin the body becomes rapidly compressed, as will be seen from the accompanying figure.

	inches.
At $8\frac{1}{2}$ inches behind the dorsal fin, the width was ..	5
At $16\frac{1}{4}$ " " " ..	$2\frac{1}{4}$
At $21\frac{3}{4}$ " " " ..	$1\frac{1}{2}$

The vertical height at the first position was 8 inches, at the second $6\frac{3}{4}$ inches, and at the third $3\frac{1}{2}$ inches. The line of the back sloped gradually to the caudal fin; the ventral line, at a point 10 inches distant from the central point of the fin, turned upwards rather abruptly and suddenly.

The front part of the head was rounded between the eyes; but the upper lip was separated from this by a deep furrow on either side, and projected forwards exactly like the peak of a cap. The lip was 2 inches broad at its extreme anterior point, where the furrows are $\frac{3}{4}$ inch apart, separated from each other by a ridge, and it narrowed gradually to a breadth of half an inch at the angle of the mouth. At a distance of $1\frac{1}{4}$ inch from the tip of the upper lip were

four minute black bristles on either side, set in a line parallel to the lower edge of the lip, and a quarter of an inch apart. The longest of these measured one sixteenth of an inch.

The crescentic aperture of the blow-hole, $1\frac{1}{8}$ inch in width, was placed directly over the eyes.

The general form of the animal will be best understood from the figure (Plate LXVI. fig. 2), taken partly from a photograph and partly from notes and measurements made by myself. The coloration was singularly beautiful, and I fear that no drawing can give any adequate idea of it.

The upper part of the body generally was a glossy black, and the under a creamy white. The upper lip (before described) was white, with a black spot at the tip, and a few irregular pale grey cloudings on its surface. The convex forehead was at first white for half an inch on the right side, and a quarter of an inch on the left; this white space was bounded by a wavy line of black spots of different dimensions, including a subtriangular space of a brownish colour, 2 inches broad, dotted with darker spots.

Immediately behind the blow-hole was an ogee of black, $1\frac{3}{8}$ inch deep, succeeded by a space of light brown colour $8\frac{1}{2}$ inches wide by 9 inches deep. Beyond this the whole upper surface of the body was black till about 18 inches from the tail, when it became grey. At a point 10 inches from the centre of the tail this grey ceased, and the tail became black above and below. The underside of the caudal fin was irregularly streaked with grey; and there was a white spot on the raphé.

Behind the eye and just above the pectoral fin was an irregular patch of light yellowish-brown flecked with numberless spots and dashes of brown of more than one shade, with an occasional black mark. There was a long narrow band above this and between it and the dorsal fin, sparingly spotted; and a second space, marked like the first, commenced at about the middle of the band and extended backwards to a point halfway between that and the tail. The markings upon both of these cannot be better described than by comparing them with those upon a sheet of blotting-paper that has been much used. They were thickest at the sides of the space, of which a small portion, just in the centre, was free from markings altogether. Between these spaces the black was less intense; a band of it, however, extended between the second space and the white of the belly.

The pectorals were black above and below; and a few grey markings, which maintained a uniform width of about 6 inches, extended beneath them over the white undersurface of the body, till at the anus the dark grey colour of the sides curved downwards and narrowed the white to less than half its width. Behind the anus there was a patch of light brown about 6 inches long, succeeded by black as described above.

Skeleton.—The condition of the bones when macerated showed at once that the animal was a very young one. All the epiphyses were distinct; the transverse processes of the ribs and the terminal cartilages of the scapulæ were unossified; and the bones themselves were quite soft and spongy.

The total number of vertebræ is 90 or 91, which may be divided

into 7 cervical, 14 dorsal, 24 lumbar, and 45 or 46 caudal. These latter are difficult to count accurately, as the last of the series are mere specks of cartilage.

The first two cervical vertebræ are ankylosed; the remaining five are free. These have each a superior and an inferior transverse process, with the exception of the seventh, in which the inferior process is absent. These processes are directed forwards and overlap each other. Those of the fifth vertebra are the least developed. The superior process of the seventh is extremely large, and overlaps those of the fourth, fifth, and sixth completely.

There are fourteen pairs of ribs. The first six have long necks, reaching in each case to the articular surface on the side of the vertebra in front of that to which the tubercle is attached. At the seventh the necks cease suddenly, and it and the remaining ribs are attached by their tubercles only to the transverse processes of the vertebræ. This attachment becomes less and less close till the fourteenth rib is reached, which is attached by ligament nearly an inch in length to the transverse processes of the fourteenth and fifteenth thoracic vertebræ.

There are nine pairs of sternal ribs. The first pair articulate to a facet upon the centre of the wings into which the sides of the first segment of the sternum is expanded; the second at the junction of the first and second segments of that bone; the third at the junction of the second and third segments; and the fourth, fifth, and sixth to the hinder end of the third segment.

The spines of all the thoracic vertebræ are well developed and inclined backwards. This inclination gradually diminishes. The tenth vertebra has an absolutely vertical spine, as have all the lumbar vertebræ. In this portion of the column they are of great height, with well-developed metapophyses. The spines reach their greatest height at about the thirty second vertebra (counting from the first cervical), and cease at the seventy-fourth.

The characters of the skull could not be ascertained, as it has not yet been sufficiently macerated. It measured $14\frac{1}{2}$ inches from the occipital condyles to the tip of the beak, which was 3 inches wide at the termination of the dental series. Length of dental series in a straight line $5\frac{1}{2}$ inches. Dental formula $\frac{23-23}{26-23}$. Unfortunately the lower jaw was carelessly macerated, and some of the teeth had fallen out, so that it was impossible to count them accurately; but probably twenty-six might be set down as the number on both sides of the lower jaw. The teeth are all conical, recurved, sharp; those at the tip had not yet passed the gum.

Viscera.—The tongue measured 6 inches in length by 2 in width. The tip was a sharply pointed triangle, on each side of which for a distance of nearly 2 inches it was deeply fimbriated. Some of these fimbriations were a quarter of an inch in length. Near the base were the orifices of numerous glands and several black spots.

The stomach (Plate LXV.) differs somewhat both from that of the Porpoise (*Phocæna vulgaris*) and that of the Pilot Whale (*Globicephalus melas*) described and figured by Prof. Turner*.

* Journal of Anatomy, vol. ii. p. 72.